

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-203498

(43)Date of publication of application : 27.07.2001

(51)Int.Cl. H05K 13/04
B25J 15/06

(21)Application number : 2000-013478 (71)Applicant : YAMAHA MOTOR CO LTD

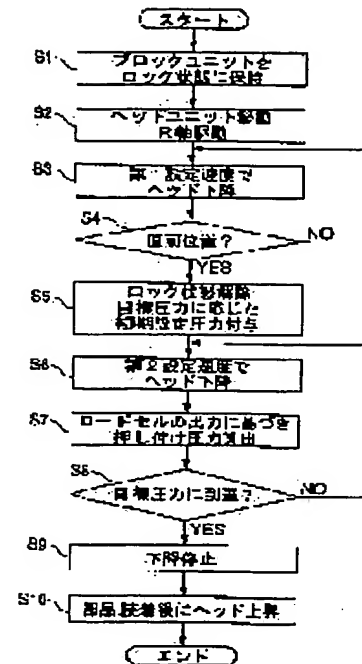
(22)Date of filing : 21.01.2000 (72)Inventor : YAMADA TAKESHI

(54) SURFACE-MOUNTING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To effectively control pressuring force using a simple configuration by keeping the reaction of the pressurizing force from acting directly on a load cell.

SOLUTION: A block unit 31 combined to a suction head 20 is supported by a frame 24, which is raised/lowered by a Z-axis servomotor 26 via a ball screw axis 22 for relative movement in the vertical direction. Except when a pressure is controlled, a piston rod 27a of an air cylinder 27 is lowered, so that the block unit hits a lower-side stopper 28b for constraint. When pressure is controlled, an elastic restoring force of a compression spring 35 is applied to a load cell 29 as an initial set pressure, by controlling the air pressure which moves the piston rod. When a part P hits a substrate T and receives downward reaction force, the pressure applied on the load cell is reduced, and the reduced amount is detected as a pressurizing force.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision
of rejection]

[Kind of final disposal of application
other than the examiner's decision of
rejection or application converted
registration]

BEST AVAILABLE COPY

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's
decision of rejection]

[Date of requesting appeal against
examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office